PROGRAM DIRECTOR VACANCIES IN ELECTRICAL & COMMUNICATION SYSTEMS

Dear Colleague,

We are pleased to announce two openings for senior-level engineering researchers/educators to serve as Program Directors in the Electrical & Communication Systems (ECS) Division of the Engineering Directorate at NSF. Positions will be filled on a one or two year Visiting Scientist Appointment, Temporary Appointment or under the terms of the Intergovernmental Personnel Act (IPA). Temporary and Visiting Scientist appointments will be made under the Excepted Authority of the NSF Act. For temporary appointments of more than one year, the usual civil service benefits (retirement, health and life insurance) are applicable. For Visiting Scientist appointments, individuals are in a non-pay leave status from the home institution and are appointed to NSF's payroll as a Federal employee. NSF withholds Social Security and provides reimbursement for fringe benefits. For IPA assignments, the individual remains on the payroll of his/her institution and the institution continues to administer pay and benefits. NSF reimburses the institution for NSF's negotiated share of the costs. Individuals eligible for an IPA assignment include employees of State and local government agencies, institutions of higher education, Indian tribal governments, federally funded research and development centers and qualified nonprofit organizations. The individual remains an employee of the home institution. The desired starting date for the first position is August 1, 2002 and for the second is October 1, 2002.

The ECS division addresses fundamental research and education issues underlying both component technologies and systems integration principles that involve signal processing, control and communications at the macro, micro and nano scales. Some of the special interagency and NSF research programs which ECS manages for FY02 funding are: Spin Electronics for the 21st Century, Enabling Technologies for Space Solar Power, Integrated Sensing, Computation, and Networked Systems for Decision and Action and Partnership in Electric Power Networks – Efficiency and Security (EPNES). In addition ECS is engaged actively in the NSF Nanoscale Science & Engineering program which is a major component of the National Nanotechnology Initiative. The division also manages the National Nanofabrication User Network (NNUN). Please visit our web site at www.eng.nsf.gov/ecs/.

The division supports research on microelectronics, spin, molecular, organic, opto and quantum electronics, MEMS, NEMS, sensors, RF MEMS, integrated systems for sensing and control, systems on a chip, complex adaptive systems, neural networks and pattern recognition for data mining, and enablers for high speed, ultra high capacity optical and wireless networks, high frequency integrated electronics, millimeter wave devices, electromagnetic modeling and simulation. The ECS division is committed to the education of engineers at the undergraduate and graduate levels, increasing the participation of members of underrepresented groups and participating in outreach programs at the K-12. The division actively participates in foundation wide initiatives such as REU, RET, IGERT, MSP, and CRCD to address 21st century workforce development concerns (details may be found at www.nsf.gov). The division's FY2002 budget is $64.83 M managed by the division director, a senior engineering advisor and eight program directors.

Each Program Director should have a breadth of technical knowledge and vision, good communications skills, and an ability to work well with others. Ability to assess risk, potential outcomes at the frontiers of research topics of interest to the division and good contacts with the research community are needed. Active participation in NSF's commitment to the broad impacts of discovery and innovation in promoting teaching, training and learning; integration of research and education; representation of underrepresented groups, enhancement of the research/education infrastructure, such as facilities, instrumentation, networks and partnerships; and the broad dissemination of research and educational advances for the benefit of society is required of all NSF Program Directors.

The two major areas of technical expertise is described below:

Position I, desired starting date August 1, 2002
The candidate should have broad experience in smart sensor systems on a chip for applications to medicine, the environment, and critical infrastructure; imaging and computational video systems, and networking methods for distributed sensor/actuator arrays, signal processing and control in integrative systems.

Position II, desired starting date October 1, 2002
The candidate should have broad experience in wireless information technology networks, wireless sensors, millimeter wave devices, smart antennas, plasma engineering, RF MEMS, mixed signal processing, EM simulation and modeling, algorithms and protocols for communication networks, and wireless sensing, guidance and control.

Program Director positions at the National Science Foundation provide a challenging experience and an excellent opportunity to encourage and support engineering research and education. The individuals will work with other Program Directors in formulating research strategies, developing cooperation among government, academia, and industry, fostering outreach to underrepresented groups, and will provide leadership within NSF and the research community. The positions require a Ph.D. with a minimum of six years of academic, government, or industry experience. We are very interested in attracting qualified women and underrepresented minority candidates to these positions in ECS.

The National Science Foundation provides reasonable accommodations to applicants with disabilities on a case-by-case basis. If you need a reasonable accommodation for any part of the application and hiring process, please notify the point of contact listed on this letter.

We would appreciate any nominations that you may have for suitable candidates. Should you or your colleagues be interested in this position, please contact the search committee coordinator, Dr. Usha Varshney (uvarshne@nsf.gov), and forward a curriculum vita to her by J uly 31,2002. Please indicate which of the two positions you are applying to. For questions or further information, please feel free to contact:

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